

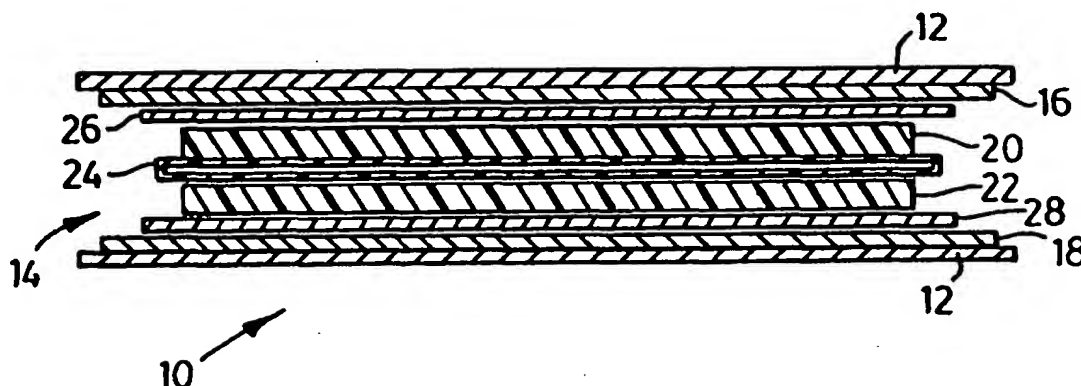
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(54) Title: HIGH CAPACITANCE ENERGY STORAGE DEVICE



(57) Abstract

A high capacitance energy storage device where electrodes (20, 22) are formed of layers of a carbonised, activated woven fabric that has been impregnated with an electrolyte. The electrolyte is absorbed by active centers at the surface of the carbonised, activated material. The prepared fabric is sandwiched between alternating graphite-based separators (16, 18) and non-conductive membranes (24) to form a capacitor structure exhibiting very high capacitance, non-degradation over multiple charging/discharging cycles, and, in AC installations, reliable and reproducible characteristics. In addition, the materials in the device are environmentally friendly.